

1052

1062

TRANSIT BOOK

~~William~~
Gilbert
van
Ingers

AUTHOR Van Duzee, Gilbert INDEX NO. 6 DATE 1889
 LOCALITY Ulster Co., New York and Somerset Co., Maine
 (Index map coordinates) (District or quadrangle name) (State)

Character of record Fulr note books of Gilbert Van Duzee on collecting
trips. Sent under direction of Dr. Williams
Ulster & Greene Co., N.Y. (Oriskany), Loc-no's 1053 to
1058 inclusive

Somerset County Maine, (Oriskany) Loc no's 1059-1062.
 The first series (Ulster & Greene Co., N.Y.) are in the lot sent to National
 Museum, June 1914. The Maine (Somerset Co.) collections are still
 in Ithaca, in charge of B.W. June 1914.)

Gilbert Van Duzee
Fulr notes 1889
Ulster & Greene Co., N.Y.
 Loc. 1053, 1054, 1055, 1056, 1057
 & 1058

Somerset Co. Maine
1059, 1060, 1061, 1062

Oriskany formations

Station numbers

4 1053-1062

1889

3

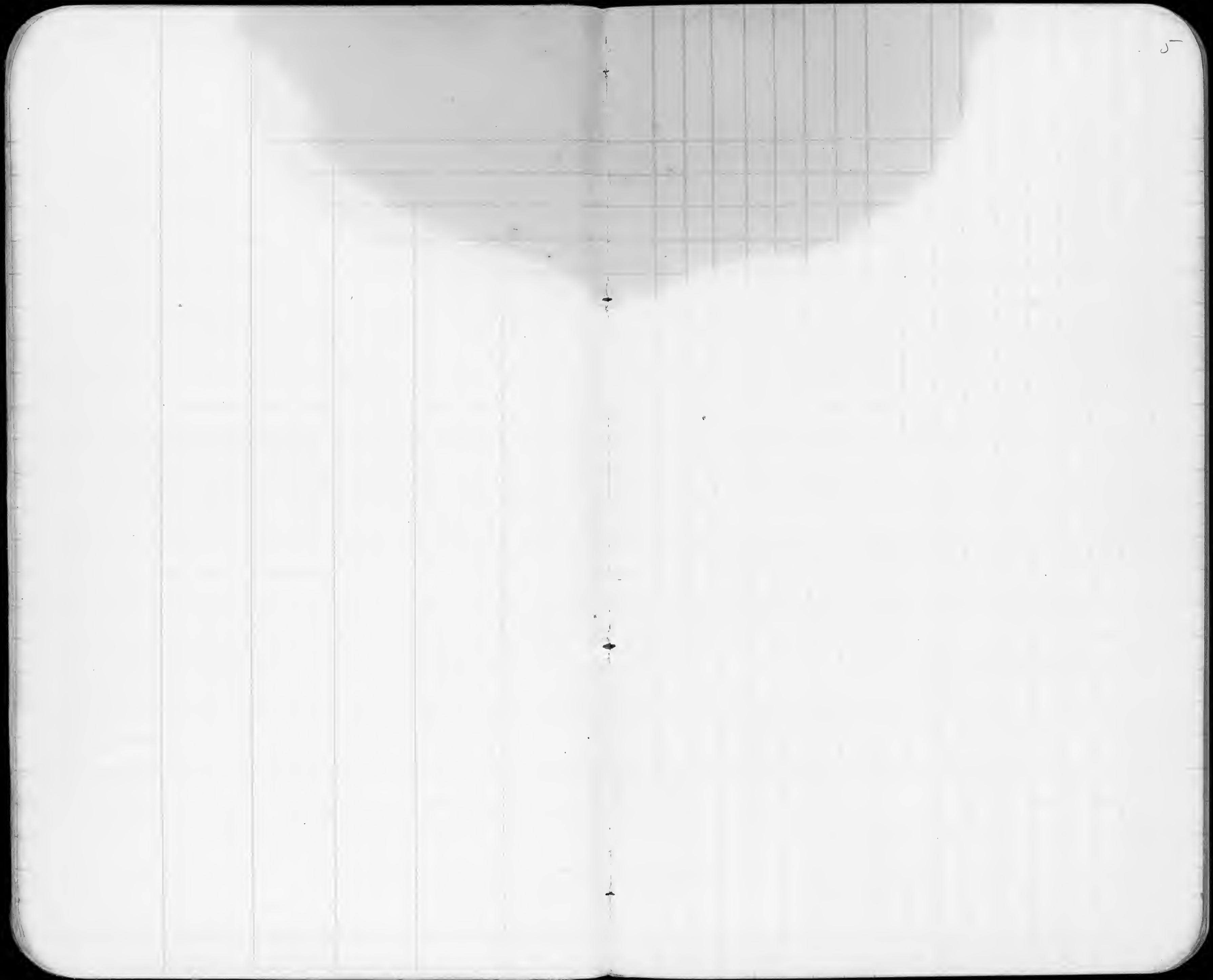
Apr 23-89

Station 1053

to Limerick Watauga Co. N.C. on
post road from Sangerfield to Kingston

Section A

Valley of Esopus Creek from
Covered Bridge north of Watauga Seat
Works up the Creek



Apr. 24-89.

1053 Section A -
on bank of Cooper's Creek, in N. of
Wm. Lead works

3

2

43

creek

4a

1 - is on the East bank below the
covered bridge.
dip $21^{\circ}30'$ W 35° N Strike $V35^{\circ}$ E
very hard sandstone containing corals
Principal spec.
Spirigera arrecta
Solenastrea planifrons
Merista lata

2 = on the East bank is about 18
ft above 1

contains many fossils.
more calcareous than 1 and harder
etc.

4 On the West bank.
outcrops at water's edge. Surface
covered with *Trinoides Canadensis*
2 specimens of a *Discina* and
one *Atrypa hystrix*.
A dark gray grit weathering to
dark brown.

3
1/2 mile N. of Leadworks on East-
side of road to the Oniskany Sandstone
is exposed for a distance of 1/2 mile.
The surface and softer layers are
entirely decomposed leaving the fossil
of which there are great quantities
free.

It comes between nos 2 on the
East bank and 4 on the West bank.
The rock is a hard grey sandstone when
not decomposed.

Apr 26

Collected from #1053-A-3-

Apr. 27. 89.

Sent box from Kingston
containing fossils from #1053-A-3 and 4
i.e. from Oniskany S.S. and Canada Gravel?
or Scholone Gravel at Glenora, Ulster Co.
N.Y. Also a smaller box containing shells
from #1053-A-3

#1053

Apr 29-89 Glenview, Ill.

Collected some *Giscinas* and pyritous *Orthoceras*? from the dark grey S.S. at the covered bridge

1053-4-7 as exposed at covered

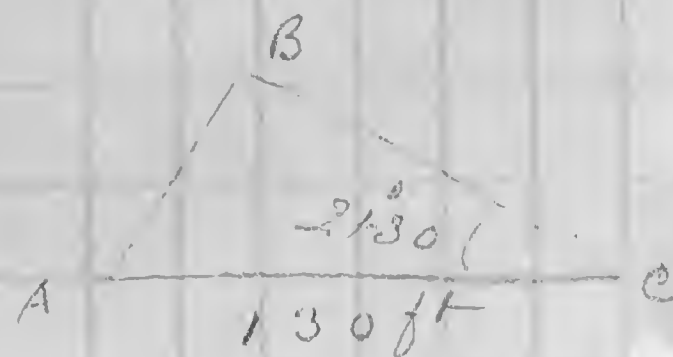
4a bridge consists of a heavy band of S.S. at the water's edge (sup 6) the thickness of which I have not yet been able to determine.

4b Above this lie about 60 ft (locks) of dark grey fine grained sandstone

4c somewhat friable when near surface more compact underneath.

Dip same as A-1 on East side of stream.

This rock contains a number of pyritous nodules.



From these data can be found the thickness of the strata between A-1 and A-4

Apr. 30-89. Lawrence Water Co., N.Y.

10 E 3 - A 3

East bank of creek $\frac{1}{2}$ m. below Lead
mill.

At 3 there is a shaly layer
very thin, fissile,
contains a few
fossils.

3E

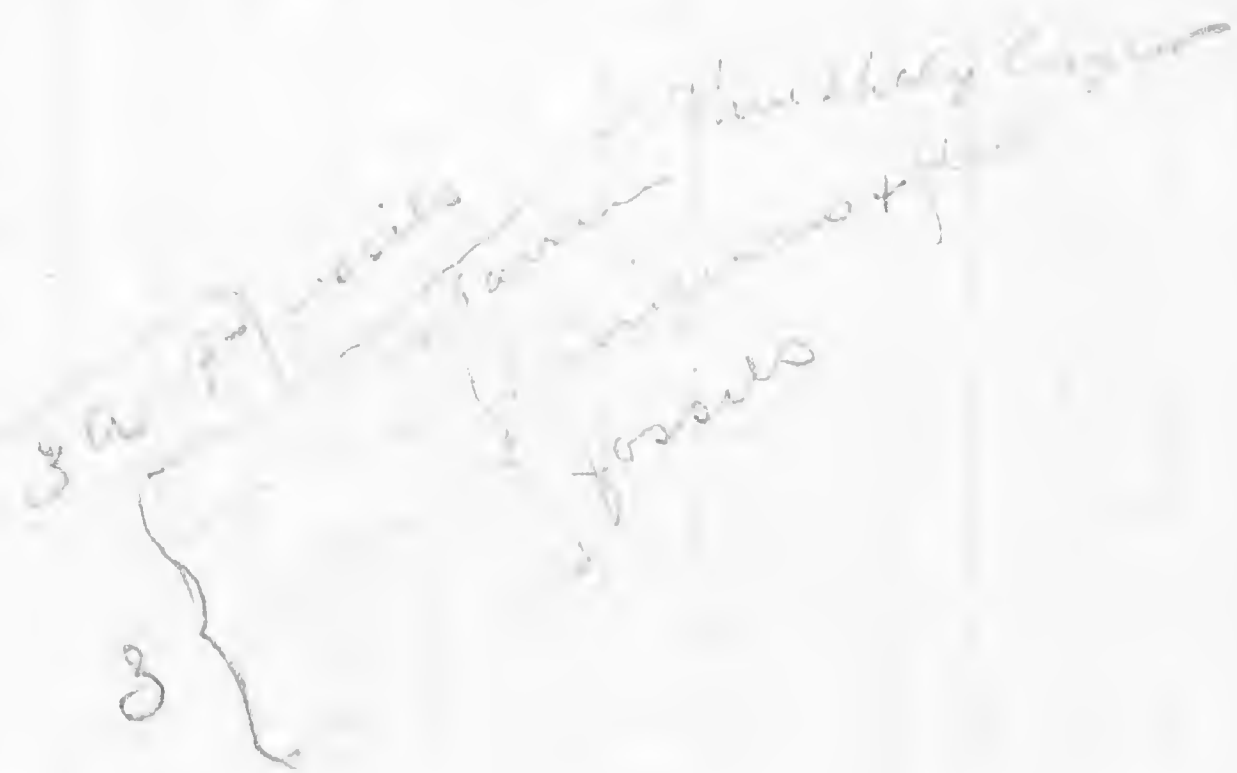
3A

In 3E are a number of heads of a
P. cepes? Strophodont magniventris
Strophodonta flabellites, a small number
some small Spirifers like S. pinnatus
and numerous other forms.

Going up up the yellow, shaly
mass in 3E.

3a

15



3a contains *Strophodonta* and
P. cepes.

It is separated from 3 by a thin
shaly layer. Heavy bedded.

Upon 3a lies a sandy layer
containing *Spirifer*.

3E = 6"

d = 1 1/2 ft traversed by 3 systems of joints
C 6 in a few fossils.

hard S.S. containing fossils

2 1/2 ft
3a

points in 3d run N 55 E
N 20 E

3C is the layer from which the
most trilobites have been collected
It is very hard.

3E is a sandstone layer containing
most of the fossils found in S.S.
at East side of road.

Between it and (3d) is a thin
layer of shale with a few fossils
x of page 14

3b is 2 1/2 ft thick

In 3d are a great many
Spinifers

dip of 3a is 18° 30' W 20° N

At this time given the strike
of 3 are exposed on both
sides of the road.

450 ft South of School House

Spinifer
3

not a faulted surface
dip of 3a is 30° 30' W 20° N

There is evidently a fault
along the line
which runs S 20° W

The rocks of 3 are glaciated
while those of 4 are not

At the Lead Mills the Esopus
Creek enters the valley from the
West
The trend of the valley is S 20° W

May 1-1889.
Collected from A 3 E/

4a Back to the mill the bottom
stream of the Esopus appears
the banks of the creek.
Dip 11° 15' W 30 N
Surface covered with *Trematis*
Canth. Galli

About 5 ft above it and appearing
4b back to the mill along stream is
a deposit of ^{very} fissile arenaceous
shale with *Trilobites* and nodules
of pyrites. It is about 10 ft thick
and rests upon the *Canth.*
Galli layer.
It breaks up into small fragments on
weathering



(Locke level)

Upon this lie some 320 ft
4C of harder more sandy shale
still fissile but breaking up
into larger fragments than
4B
4C contains pyrite nodules
Found fossils on the north bank
about 500 yds below the
West Shore R.R. bridge.

4d is a hard sandstone.

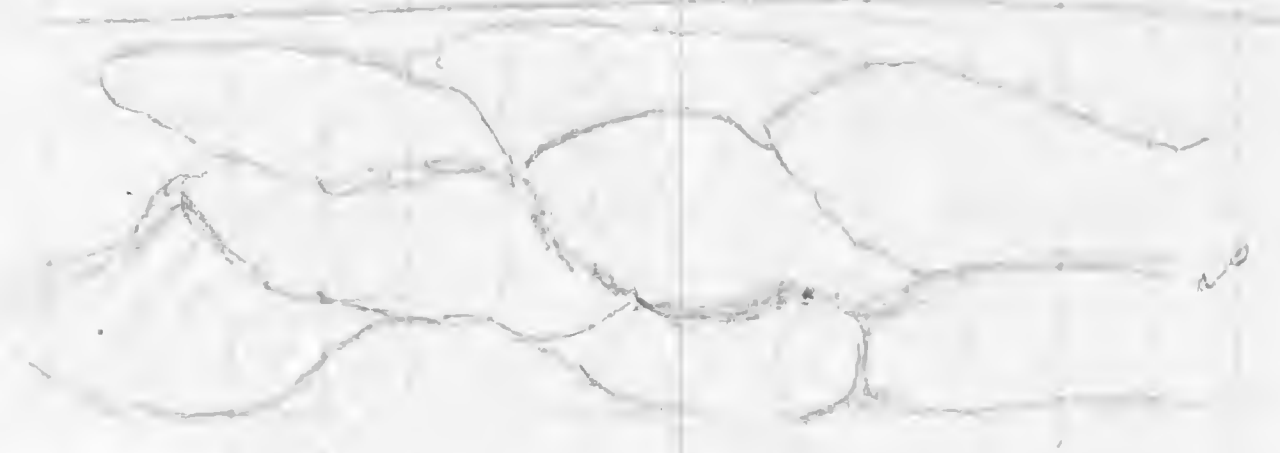
lighter in color than (C) and
more compact. The lower portion
(about 25 ft) is broken up by
joints at right to the plane of depo-
sition while the upper portion
35 ft is massive & more uniform.

It is also well exposed along the
East side of the R.R. track.
Most of the fossils were
collected

5/1053-A
5

About 1000 ft East
of the R.R. bridge is an
exposure of a light grey
limestone. Very hard.
Contains many fossils.
While 4d dips about 20° N-W
5 is almost vertical & strikes
N-E.

numerous fine bands of



transverse section of 5

sandstone was brought in
horizontally (parallel with plane of
deposition).

It contains many fossils
Crinoid stems corals

higher up
It also contains many fossils

Calcutt layers

It runs along for about 150 ft and then disappears beneath the drift.

2000 ft further north it appears again with a dip of 70° and strike N 30 E which changes to 44° within 100 ft and goes under the drift 150 ft further north.

It can be seen on the road from the R.R. Station ^{Marion} to Glenview in the first ridge.

23
May-2-89

Spent day in packing up the fossils collected from 11053.

A-3+4+5. Shipped the box from Mt Marion.

Returned to Wilmington in evening.

May, 3, 89 Took stage in A.M.

to Marbletown. Coniferous strata exposed along the road.

Coniferous especially well exposed at Marbletown. Collected some fossils from the stratum corresponding to A 1053 A 4d.

May 4, 89

Sta. 1054 - A Township of
Marbletown Water Co. N.Y.
Section 4 ^{formed} in Croopus Creek at
farm of George Van Wageningen,
1 mile N. W. of Marbletown, N.Y.

1 - The first part of creek at corner
to road. A blue stone containing
fossils mostly corals in the
lower part. Exposure about
1000 ft.

dip = 5° N 10° W.

color to dark grey

It gradually runs into
but sometimes fossils run into

2. Overlying 1.

Hard grey S.S. weathering brown.
a few fossils. only 6 in thick.

3 is a S.S. almost barren
fossils.

Thickness of fossils N 10 E. and
W 10 N.

180 ft exposure dip 5° N 10° W.

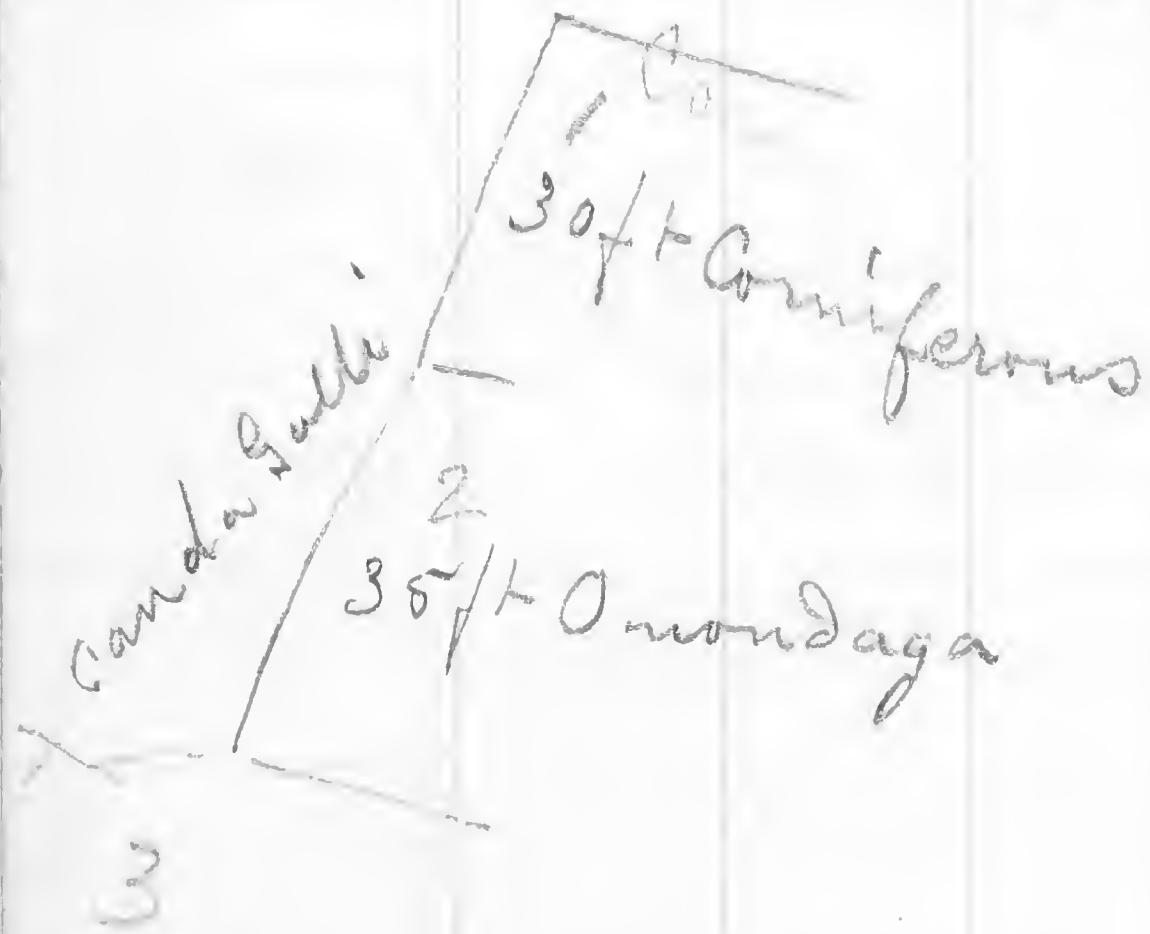
These S.S. soon runs under
for a mile & a half no
rocks are seen.

Then about 60 ft of soft shale
4 Shales are seen. The lower parts
have their surfaces covered with
iron. They resemble the
Stracena irregular bed.

Thick grey where not in a layer.
They contain a great abundance
of a minute Lingula and a
small irregular form. Some of
the shells are small. Some are
small. Others are large. Some
are small. They are exposed
along the creek for a bit. 1000
Then they run under the drift.

Anderson tells me that a layer
below any of these in this section
was formerly quarried for flag
stone. I saw where it outcrops
on the hill side and it must
be at least 100 ft below
A1

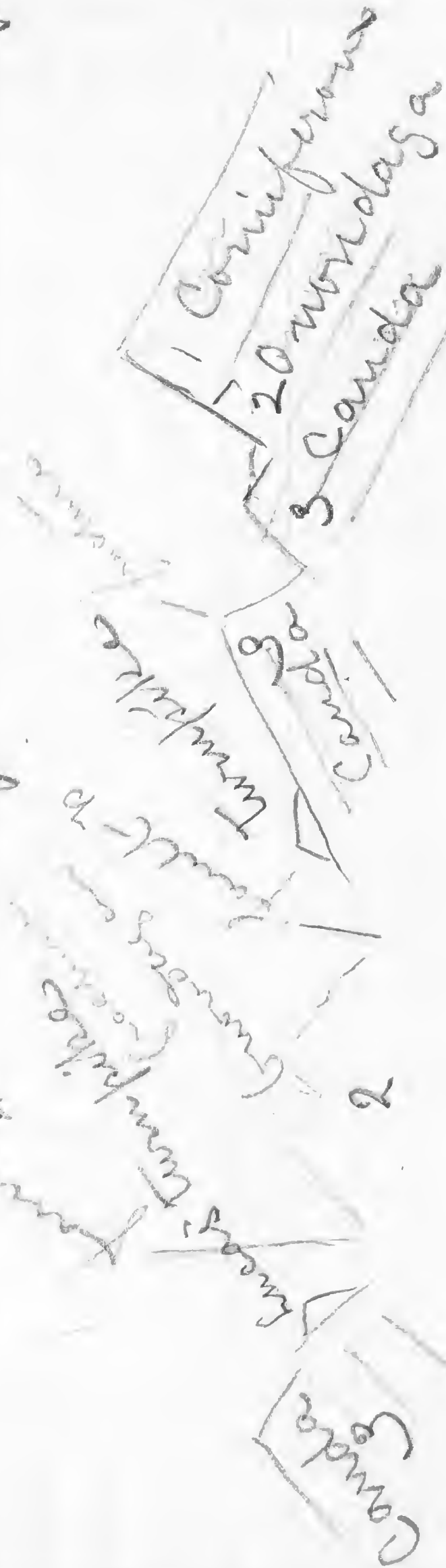
May - 6 - 89. $1\frac{3}{4}$ mile E. of Lonsdale
 Birch's residence. -
 Warbleton N.Y.



The Corniferous and Onondaga are well exposed along the line of the Kingston & Warbleton Turnpike.

2 1/2 m East of Warbleton looking south

4 10 5 4 B



Direction of section East & West -
 length of section 1/4 mile.
 Fault a + b intersect at an angle of 20° at the fork
 in the turnpike and extend in each direction
 some miles.

1055

at 4th Simmeswater + further S.E. than the section on page 27.

Δ 1055-A-

4

Lake

2

Lake

Canda Gully

Which I think not ascertained
One of the two typical specimens of *Stromatolites*
which was found in the bed and in adjacent
The rock is very hard and in adjacent
difficult to extract any of the numerous
fossils which it contains. (See 1055 B, 1-4)

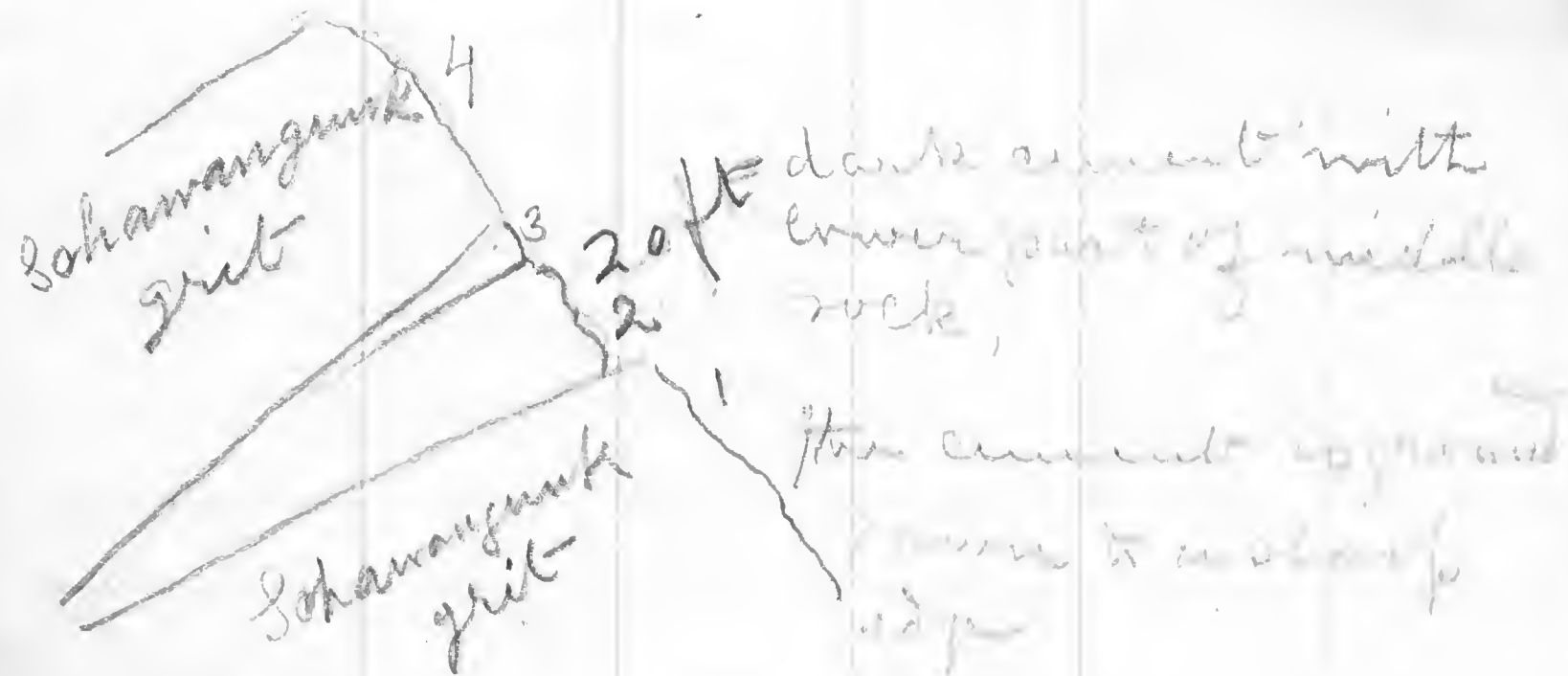
C. St. Lawrence, St. Lawrence
Sta. Rosendale twsp. Ulster Co. N.Y.

Δ 1055 B

Section at mouth
Looking North



Δ 1055 C the old
 looking South my father's Quarry
 near Catholic Church at
 Rosendale.

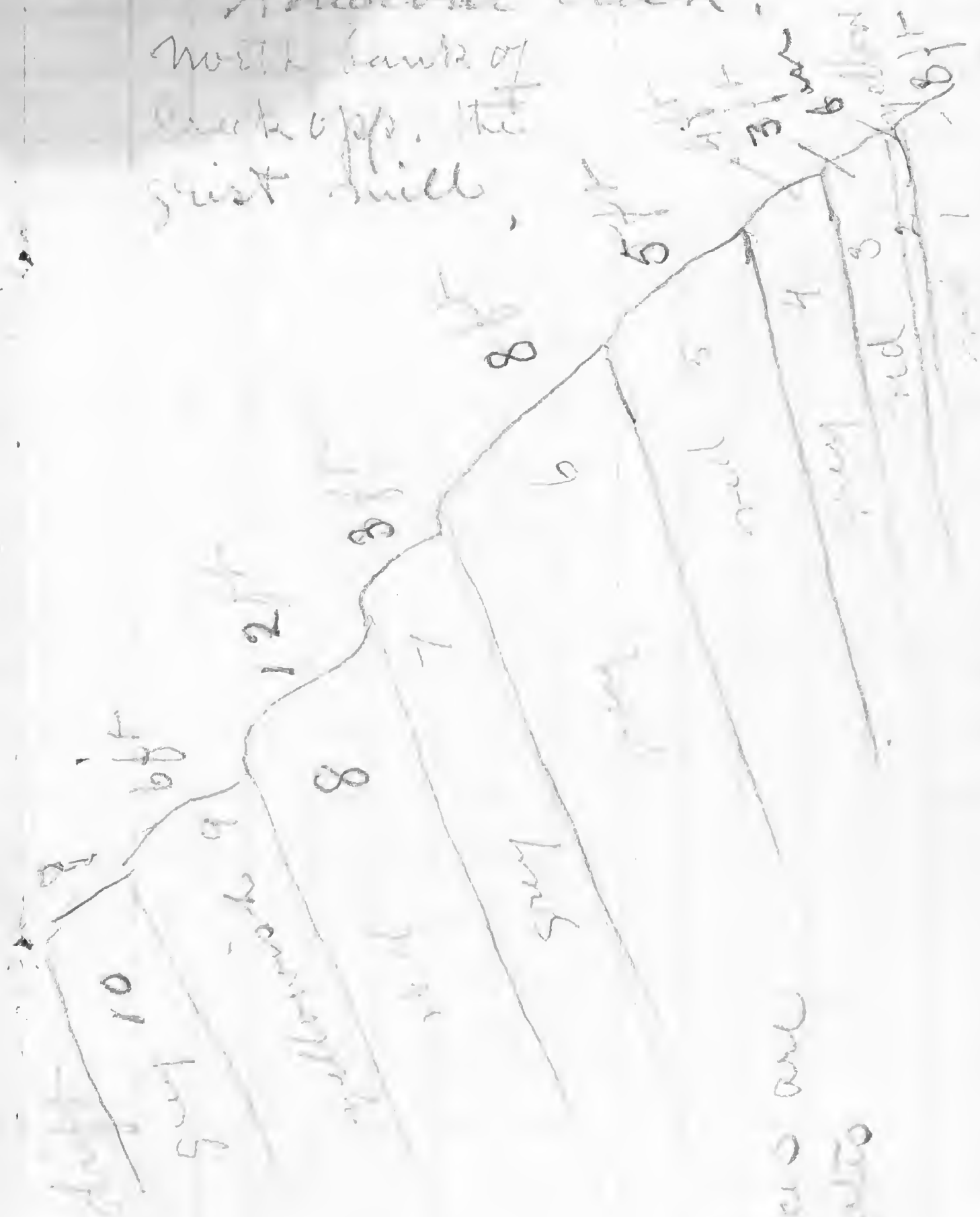


The rocks dip E.S.E.

Both surfaces of the grit are
 grooved on account of the grinding
 against the cement rock.
 Some of the grooves are 1 foot and
 may are from 4-5 inches deep

- 1 = grit
- 2 = middle rock
- 3 = portion of dark upper cement
- 4 = grit.

Δ 1056 A High Falls on
 Rondout Creek.
 With banks of
 creek opp. the
 grist mill.



The bottom 20 are
 are estimated

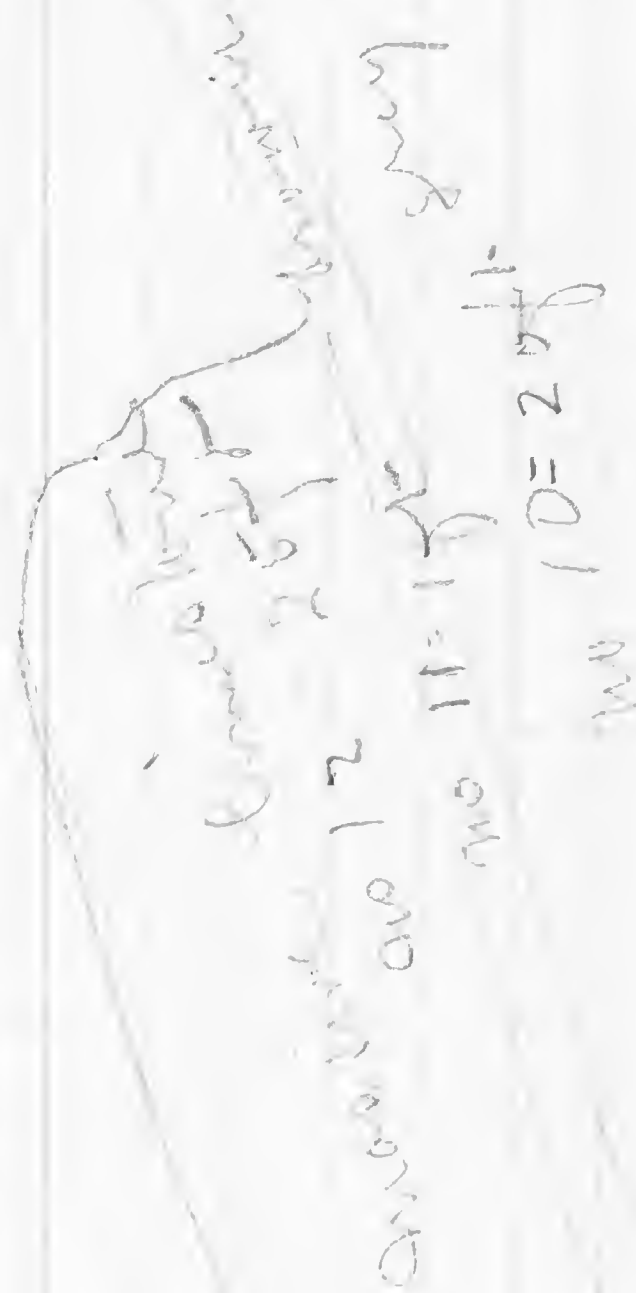
1056 A



1056
A

No 12 forms the fall in the Roundout Creek.

It is the same stratum from which in other places the "dark cement" is quarried. The color changes within short distances.



Mr Louis Berier tells me that at High Falls there is a section in which all the strata from the Medina Sandstone up to the light cement which is covered by the drift. They all lie conformably upon each other.

Δ 1055-II-1

is at the Southwest corner of the 5th Binnewater Lake in town of Rosendale Ulster Co. N.Y.

It is on the slope of the hill on the west side of the old Cranberry Dam.

It is the continuation southerly of 1055-A-2. Only the rock on the eastern side of the anticlinal axis is exposed. It is rich in trilobites.

It is the station where Mr L. Berier found one of the specimens of *Homalonotus major* which

was described by R. P. Whitfield in the Bull. Amer. Mus. Nat. Hist. for

Another specimen of the same species was found the same day by Mr Berier at
Δ 1055-A-2.

Δ 1055-A-1

Is on the West side of the anticlinal axis of Section 1055 A.

It is on the West side of Lucas' turnpike $\frac{1}{2}$ mile N.W. of the 5th Binnewater Lake.

Either Schoharie Grit or Canada Galt. Contains fossils. Numerous joints at right angles to planes of deposition.

May 7-89 -11054 C

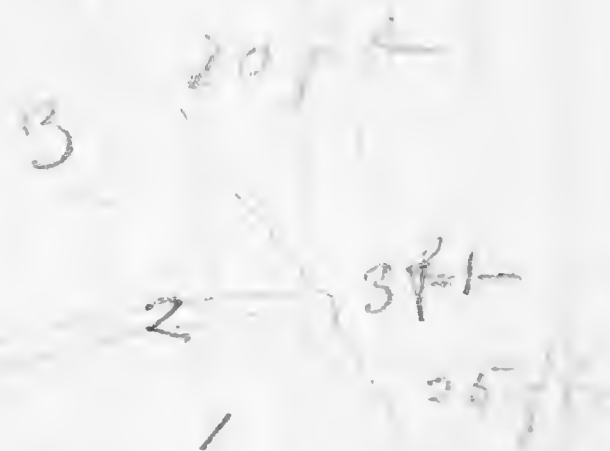
On land of Andrew Middagh
about $2\frac{1}{2}$ miles N.W. of
Marbletown.

They are exposed along the
W. bank of the Esopus C. and
form a bluff 100 ft (eye estimate) high.

- 1- The rock is a fossiliferous
coarse arenaceous sandstone and
contains many rounded con-
cretionary masses which are
much harder than the rock itself.
dip = 8° W 30° N.

100 ft further dip = 6° W 35° N.

The lower 25 ft are barren



1 and 2 are barren

3 contains fossils

The creek bed runs a point
 $\frac{1}{2}$ mile above here to
Five City is worn into the
Hamilton? paringstone grit.
This extends on westward to
Phoenicia? and Rodburg.

- 2- 3 ft of alternating hard sandstone
which is not the weathering and
beds of sandstone like No 3.

No 3 - 75 ft of dark grey sand-
stone breaking first into blocks
and then into thin layers.
It is full of fossils, Brachiopods
chiefly a Rhynchonella and Laniella
and Orthoceras.

4 1057 = Olive City Water Co. Inc.

Letter

A on Esopus Creek beginning
on land of
 $\frac{3}{4}$ miles East of Olive City N. D.

1- a rather coarse green clay
at surface of water, about 2 ft thick
2 N10W

2 M70W 2000

2 - 8 ft of laminated sandy shales

3 - S.S. 1st

4 - Clayey S.S. with rounded
structures 7 1/2 feet - green weathering
to reddish upper part micaceous

5. Sandstone 1 1/2 ft

6. 4

7. s.s. 20 ft - thinly laminated S.S.

18- fly stone stratum 10 ft -

9 The flagstone contains pebbles
and plant remains
and is composed of argillaceous

10 flag stone garden

No 7 can be seen much better
 $\frac{1}{4}$ mile above the covered bridge

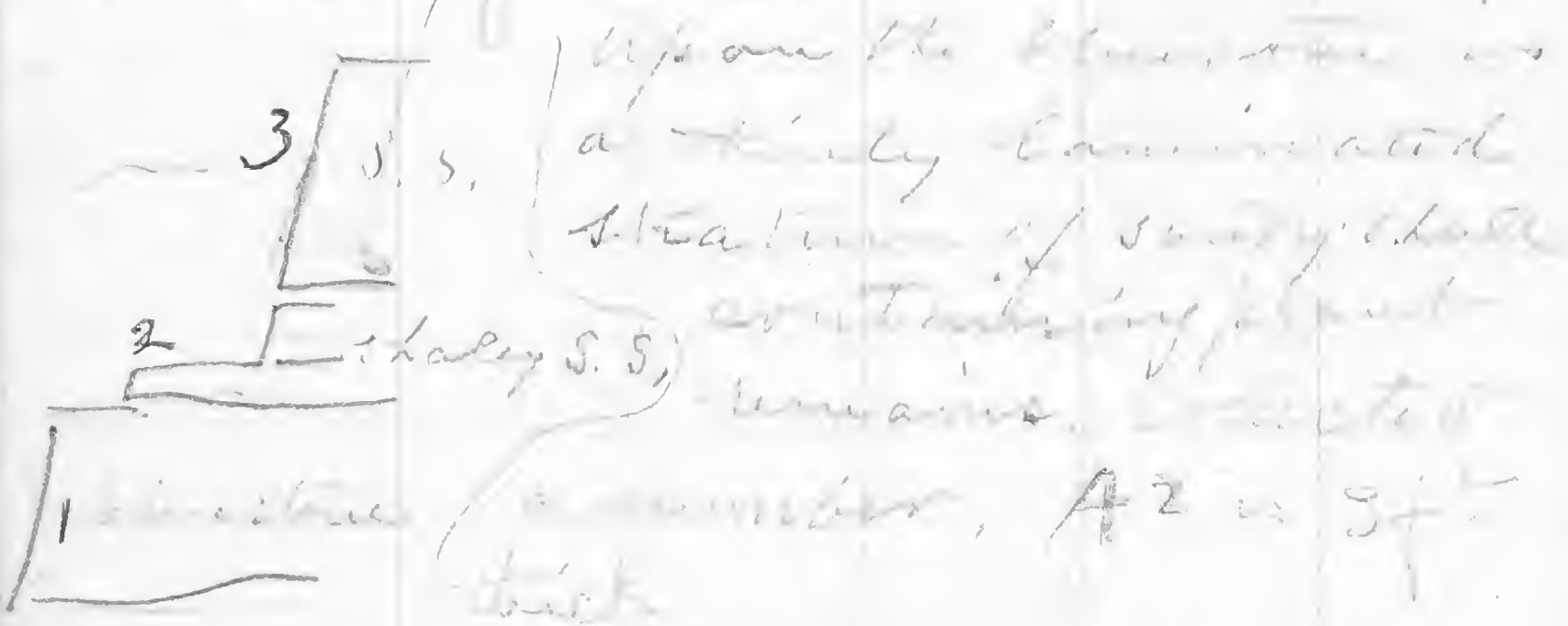
It is there seen to consist of
fossils and shells running
into the sandstone and 8.

#1058

May - 9 - 89 #1058 A Lanesville, W.Va.

In quarry back of Frank North's house
on West side of valley.

The rock in the lower part of the quarry
is blue stone, rather heavily bedded.
About 2 ft thick.



May 10 and 11 the rain continued.
May 13-14 Collected more fossils
from Frank North's quarry. Also hunted
up the locations of the number of
other quarries in the vicinity.

May 14 rained

May 15-89 A.M.

Ascertained height of Frank North's quarry
above the railway Sta. to be 40 ft
(by Locke). The quarry is on the N.W.
side of the valley about N40°W of
the S.C. + C.M. R.R. Sta.

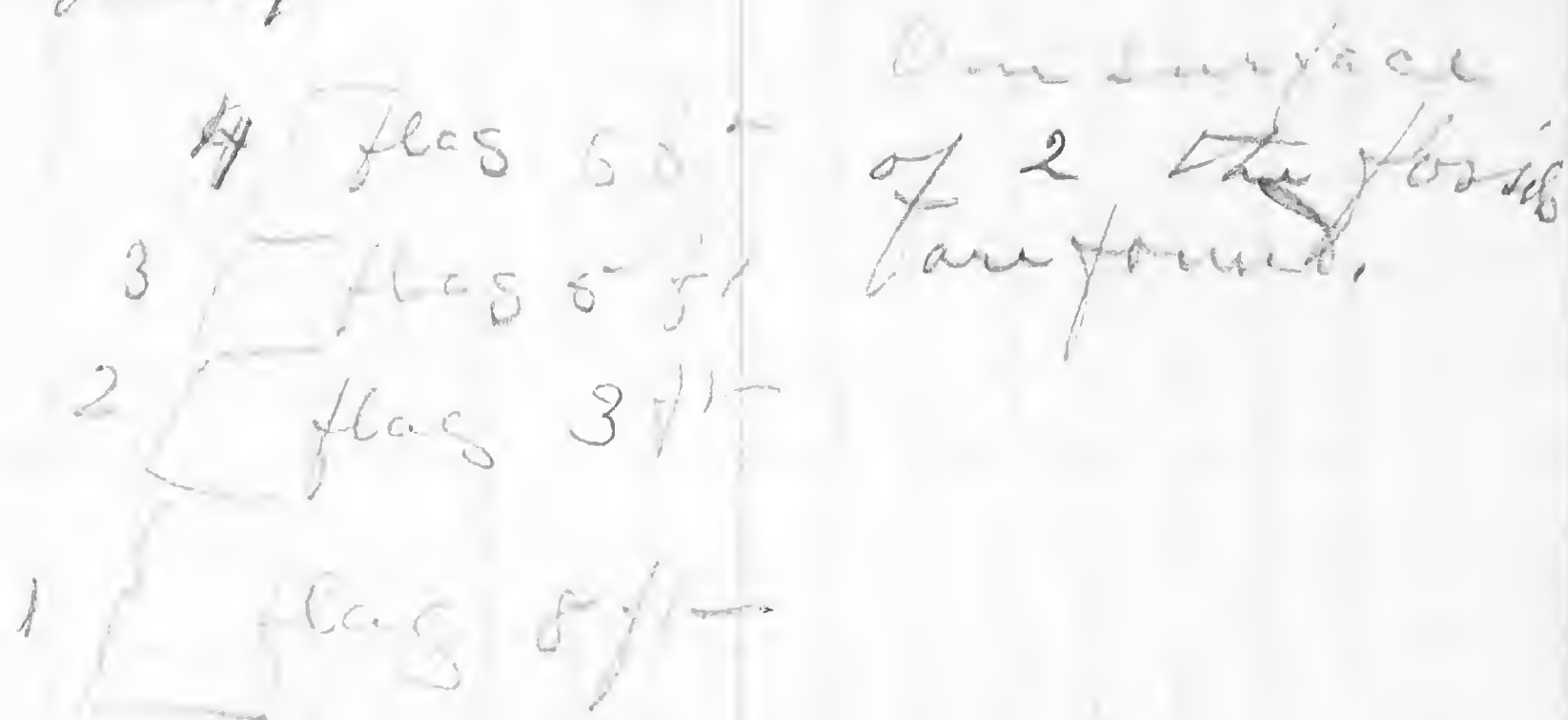
The altitude A.T. is not given in

Dunnell's Dictionary of Alt. of N.A.

Alt. A.T. ^{of track} is 1332 ft (R.R. Survey)
1058 B.

Frank North's old quarry on mountain
in front of his house is 250 ft (by Locke)
above the R.R. Sta.

It strikes about the middle of the
high cliff 200 ft above Frank North's
quarry.



May 16-89 Lanesville N.Y.

Quarry No 1

Edw. Jones' Quarry on hill back of his house
is about 75 ft above the bridge on road
near his house. (Locke)

Quarry No 2 1058 @

300 ft further N.W. of No 1
alt. above the bridge 105 1/2 ft (Locke)
plant fossils fine

3 flagstones 6 ft

2 shaly plants 3 ft

1 flagstone thick?

In P.M. packed up box from 1058
will be expressed in a day or so

May 17-89.

Left Lanesville on 8.30 A.M.
for home.

On way down M. & D.R.R.
saw fine exposures of rocks
looking like the Ithaca Chert
in the vicinity of Stony
Hollow and along R.R.
from there to Kingston.

Altitudes A.T. of Stony Clove +
 Catskill Mt R.R. in Greene Co N.Y.
 Furnished by Geo. Wykendall. Sent
 Supt. May 20th 1889.

Chicksters	1012 +
Flynn's	1148
Laureville	1332
Edgewood	1778
Stony Clove	2070
Kaaterskill f.c.	1723
Smelter	1602

Maine trip

45

May 20 - 89

Left home on 6.30 P.M. N.Y. & N.
 H. R.R. for Boston via Albany
 en route to Paris Point Me.

Reached Camden which is as
 far north as the R.R. runs
 on the afternoon of the 21st.
 From there went by stage to
 Bingham where put up
 for the night.

May 22 The rocks about Parlin Pond
appear on nearly again, to be all
massive schists.

Dips 90° Strike N 60 E

It now took stage for the Trucks.

May 23 - Left Trucks in AM,
by stage for Parlin Pond,
arrived there at noon.

May 24th 1059 Parlin Pond Lower
Co. Me.

Many boulders containing fossils
were found on the hill in
immediately back of the hotel.

The rock is a light bluish gray
sandstone weathering to light
gray.

An outcrop occurs on the
North shore of Parlin Pond. The
rocks are fossils. Dips 35° E 45° S

The rock on East shore

May 25 1059 x' A Boulder on
West shore of Parlin Pond full of
fossils.

Examined West shore of lake.
Some mudstone with fossils were found.
No bed rock on West shore.

May 26 Sunday

May 27 -

Hired a man to drive me to
Hoose River 15 m North of Parlin
Pond to look for a guide. Succeeded
in finding one, a young man, a
"river driver" who is well acquainted
with the region to be looked over.
Intended time to report at Parlin. To
be next day (Tuesday). Pay to
be made for time of engagement.

1059

May 28 Bald Mt

At noon started out with guide to ascend Bald Mt 5 mi S.W. of Parkin Rd. There are two interesting ponds one on each side of the ridge & separated from each other by a narrow neck of land. A heavy gray sandstone on top dip 90° N 15 W no fossils

May 29. In early A.M. went up onto the highest peak. A very high wind was blowing and a snow storm in full blast, very cold. Everything frozen. No bedrock was seen.

In afternoon returned to hotel.

49

May 30 W. of P. P. 4 mi.

In morning with guide examined the hills back of Parkin Pond (West) No bedrock was seen.

Many fossiliferous sandstone boulders were found.

In afternoon went along north shore of lake, A sand stone whitish on its weathered surfaces but bluish grey in its interior outcrops for $\frac{1}{6}$ mi along the shore. its dip 35° E 45° S.

The rock is extremely hard.

At one point some impressions in the rock look like fossils.

1059

1059 C

May 31. Parlin Stream

X" boulder of very white S.S. = +6 or +8.

The section begins on Parlin Stream at the middle dam where the stream runs for over a mile through sandstone & slates.

C⁻⁵ stone is a 2 in layer of very soft shale 4 1/2 ft above C⁻⁶

In some place -12 is brown in others gray & in others again almost white.

-12 is shaly toward the bottom where in addition to the species it contains above it contains some others.

1059

1059 C

	0
-1	4 ft thick barren
-2	7 ft + fossils
-3	6 in fossils
-4	13 ft barren
-5	5 ft barren
-6	1 ft shaly very soft
-7	9 1/2 ft barren
-8	135 ft barren
-9	7 ft fossils few
-10	1/2 ft slate
-11	2 ft barren
-12	40 ft

-12

1 ft fossils S.S.
6 ft barren S.S.
2 ft fossils S.S.
7 ft barren
24 ft S.S. thin layers with fossils on surfaces.

1059 C

+ 9	25 ft bluish S.S. with quartz ^{barren} lenses
+ 8	6 ft white S.S. barren
+ 7	1 ft S.S. blue with ^{barren} lenticles
+ 6	1/2 ft white S.S. barren
+ 5	110 ft blue S.S. barren
+ 4	6 ft shaly
+ 3	1/2 ft fossils S.S.
+ 2	6 ft blue very lt. barren S.S.
+ 1	1 ft fossils
C 0	36 ft bluish very hard barren S.S.

C+8 and C+6 are soft like grindstone

C+7 is thinly laminated at top and is ironaceous

1059

58

June 1-89. In morning packed up box of fossils from "1059". At noon took box with me by stage to Jackmantown. Sent box by C. P. R. R. via Greenville.

June 2 - Sunday. Jackmantown Me.

June 3-89. In morning went by canoe up into Wood Pond and thence into Attleam Pond.

Examined the shores of both lakes in search of the northern limit of the Oriskany.

Spent June 3rd and the morning of June 4th in searching the shores.

The ledges of which there are many are all of granite.

June 4-89.

In morning continued searching the shores of Ottau Pond.

All the ledges seen are granite.

About noon returned to Jackman town.

In afternoon went with guide along the line of the C. P. R. R. East of Jackman town.

Found a ledge of blue slate 4 miles below Jackman town dip 45° N - unfossiliferous

June 5-89-

At 9.30 Am. started down Moose River. In morning it began to rain hard and continued all day. As I was not feeling well we pitched camp about 3 mi below Jackman town, and we spent the night there.

1060
A

June 6-89-

Long Pond 41060

41060 - A -

At northwest end of Long Pond are three ledges of slate forming islands in the lake.

No 1 is nearest the inlet and to the northeast of it.

The rock is a dark fissile slate about 50 ft thick

The dip is 55° N 20° W.

unfossiliferous

No 2 About 100 yds N.E. of No 1 - same rock - same dip - thickness 10 ft.

No 3 - about 300 yds north of No 1 same rock - etc. thickness 25 ft

1060

A

No 4 - a ledge on north shore at
Hugh Redmonds farm called
by the lumbermen "The Fox
Ledge". It is about $\frac{1}{4}$ mile
S.E. of No 3.
The thickness is about 375 ft
thick - dip 55° N 20 W.

June 7-89-

In A.M. took little up to
Sturgis town where it will be taken
to Jacksonton on Monday.
As a raft of logs was almost
at the mouth of the river we
hurried down the lake and
entered the rapids. The river
for 6 miles is quick water. It
was very exciting work going
through.

1061

A

57

Camp fire on Little Brasna
Lake that night.

On the way down fossils were noticed
in the ledge at Sturgis Brook,
Left for examination until
return trip.

June 8-89 - "1061 Sandwich trip
Little Brasna Lake

1061 A on south shore of Little
Brasna Lake - along the
line of C. P. R. R.

The section begins at the
237 mile mark and extends
about $\frac{3}{4}$ m. along the R. R.
track eastward.

A⁰ is a heavy bedded sandstone
brown - thickness unknown.

A¹ 130 ft East of A⁰ is 15 ft
in thickness. Barren
bluish gray on new surface but
weathers to gray ~~and blue off~~.

A² 140 ft thick. Hard blue
compact S.S. weathering to
whitish dip 43° N 10° W barren

A³ is 1230 ft directly ESE of
A² - thickness 60 ft
it is more shaly than A²
dip 62° N 10° W. 28 ft from the
lower surface fossils were
found.

A³ forms a cutting 100 ft long.

A⁴ 1140 ft E of eastern end of
A³ a hard heavy bedded S.S.
blue weathering to gray 6 ft thick

A⁵ a bluish brown shaly sandstone
containing fossils - 8 ft thick

A⁶ Hard sandstone with round
vertical borings - 8 ft thick

A⁷ heavier bedded S.S. light blue
gray - 15 ft thick barren -

A⁸ 12 ft shaly dark surface
laminated - barren -

A⁹ 12 ft blue gray S.S. like
A⁷ - for fossils.

A¹⁰ 15 ft blue laminated shaly
sandstone barren like 8

A¹¹ 50 ft hard bluish gray like 9
barren

A¹² 10 ft laminated shaly S.S.
with fossils.

30 ft drift

A¹³ 10 ft hard heavy bedded
sandstone barren

After finishing this section we
started down the river for
Kharassna Lake.

1062
A

1062
B

61

△ 1062 Big Brassa Lake

△ 1062 - A - On West Shore of lake commencing with ^{AD}
a low ledge on first point
about 1/2 mile from inlet (Burl
River)

A' It is a rather solid shale
with very fine fossils - it dips
25° E 10 S.

Continued along shore to a
point near the mouth of
Brassa Creek (where we
stopped for dinner)

After dinner went up stream
and ran the following section

△ 1062 - B Brassa Stream
B' is a ledge under water about
2 miles above the lake.

B² is a ledge of shaly S.S.
forming a fall in stream
about 2 1/2 miles above the

1062
B

A 1062-B - Brassa Stream
continued.
lake. It dips 28° N10W
2 fossils? were found in it.

B³ is the same rock with
same dip, exposed 100 yards
up stream

B⁴ is same rocks same dip 1000
yards further (above B³)

B⁵ same - 200 ft further

B⁶ same rock - same dip -
300 ft further one fossil

B⁷ 200 ft further the same
rock is exposed but contains
very many fossils.

B⁸ 100 ft further same rock
with a few fossils

B⁹ 250 ft further same
rock no fossils

a
62

B¹⁰ 200 ft further same
rock no fossils -
dip 57° N10W

This is as far as we could go
in canoe.

Went away down stream +
camped for night.

June 9-89 - Sunday

Rained all day - came
down stream and pitched
camp on East shore of Lake
about 4 miles from outlet

1062¹⁶
C2

June 10-89-

1062 C - East shore of
Brassna Lake

1062 C' is on East Shore 2
miles below inlet of Brassna
Stream. A ledge making out
into the lake.

A hard siliceous laminated
sandstone. Color blue gray
weathering to brown gray
many quartz veins. In places
it in various directions
Dip 90° Strike W 20 S
Barren of fossils.

If continued across the lake
it would strike the West
side about 3/4 mile north
of 1062 A'

1062⁶³
C

63

1062 C²

On point forming the North
shore of Wood Church Cove.

A very thick bed of barren
sandstone.

The rock is traversed in all
directions by joints so as to
make the determination
of the dip impossible.

1062 C³

On point 3/4 mile below
(downth of) the last station near
the smaller of the two islands
3 miles from the outlet.

The determination of the dip
is difficult.

Numerous nearly parallel
lines traverse the bed in
a W 20° S direction. These

lines are not continuous
Some fossils were found
lying in another plane than
that shown by the lines

1062

above mentioned. If the plane of the fossils determines the plane of deposition of the rock then the rock dips 18° N 28° W

If the dip is 90° the exposure is 145 ft thick in a S 25° E direction. If 18° is the dip then the thickness can be ascertained from the measurement of 145 ft

1062 C4

Point at base of island 2 m from outlet being 1 m S of C3.

Dip 55° N 20° W as determined by fossils. The rock is of a schistose character with mica & iron oxide.

The large island is a continuation of the ledge on shore.

1076

B¹ 1076 Moosehead Lake Me.

65

June - 11 - 89 - 1076 B -
on South and East-shore of
Farm Island on Moosehead
Lake.

B¹ On South shore -
a thinly laminated grit-
dips vertical - strike W 20 S
(A very few fossils ?) @
The rock is a blue gray weathering
to iron gray and red
One specimen of *Epimorphum*
Canda Balli was seen.

B² Hard sandstone on North
shore of first cove going up
the East shore and forming
ledges making out into the
lake for 2 miles up the
shore.

B³ Where the rock changes
abruptly to a dark fine grain
clay shale. A specimen of
B² was collected and one
of B³ only 1 ft from it.

1076

B₃

The point where B₃ is exposed is about directly north of B₁ and about $1\frac{1}{2}$ mile from it (by air line)

B₃ is the last ledge on the East Shore.

Cooked our dinner on the North end of the island and then paddled over to Loccatan Stream.

1076

C

67

June 12 - 89

A 1076 C Loccatan Stream.

C¹ is a ledge under water about $3\frac{1}{2}$ miles above the lake.

C² on the right bank about 300 ft below C³ - a dark fissile shale without fossils
dip 73° N 20° W

C³ forms the first fall - a ridge across the stream - shale -
dip 75° N 20° W strike W 20° S
thickness about 30 ft \leq
About 4 miles above the lake.

C⁴ on left bank $\frac{1}{2}$ mile above first fall - a ledge² in woods about 50 ft back from the stream. Same rock as C³.

C⁵ $\frac{1}{4}$ mile further up - same rock - barren -
dip 90° N.

1076
C

C⁷- At Devil's Elbow 2 miles below dam - a fair exposure of shale.

C⁸- About 1/4 mile below Clark's Second Driving Camp on left bank - About 1 1/2 miles below the dam - A low ledge of the same shale

C⁹ At dam 8 miles above Lake a fine exposure of the shale which here contains cubical crystals of iron pyrites. no fossils. Thickness about 80 feet.

1076
D

69

June 13 - 89

41076 D Along shore from Loccation Stream to drivers store house.

D' At mouth of Loccation Stream a ledge of same rock as C³ on the stream
Dip 90° strike W 20 S ⊕

D² is 1/4 mile N 50 W of D' ⊕
The rock is slightly different
D² is stratigraphically above D' - All following are below D¹

The next ledge comes between D¹ and D² on the opposite side of the core.

The next is D¹ continued across the core.

D³ The next D³ is about 1/2 miles from D² and shows a thickness of 200 ft ⊕

(1076)
E

II⁴ $\frac{1}{4}$ m from D³ has some
ironiferous bodies in it
5 ft thick a

The island is of the same rock

II⁵ towards the next point
850 ft thick

dips 47° N 20° W

II⁶ About 700 ft south of the last
exposure of the shale

a hard sandstone - heavy
bedded, no fossils c

near the island $\frac{1}{2}$ m N-E
of mouth of Tonne River stream
dips N 20° W of house on head
of Tonne Island.

At this point the section was
abandoned on account of the
rough water.

(1076)
E

71

June-14-89

1076 E

Shore of Succatun
Point.

E¹ is on the end of the point
a shaly sandstone with an
abundance of fossils.

The Shaly rock on the Succatun
Stream changes to a heavy sand
stone below the mouth of the
stream. Near the end of the
big point there is a small
point and on this small
point is the locality where the
fossils occur.

E² On East side of point - with
fossils - dips 9° N 20° W

Further North the rock
changes from the heavy sandstone
to a shaly sandstone. Fossils

E³ were found in this a point
south of Moose Brook near the

1076
F

island. The dip is 90° N 20° W
There is a layer with ripple
marks. The inclination of the
ripple marks is 50°

One foot above the ripple mark
layer is the layer with the fossils
which is 3 inches thick

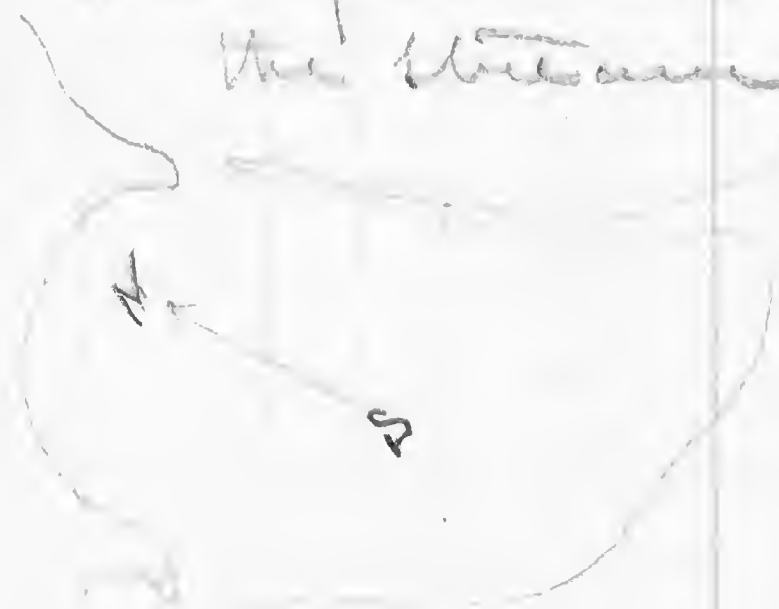
Above it there is a sandstone
stratum 4 inches thick

E4 on north side or upper part
of ledge - a thin band of fossils
in the sandstone

The thickness of E3 + E4 is
about 100 ft.

73

June 15-89 - to N.W. Carry
At the mouth of Williams Stream
is a fine sandbar about 200 ft
long by 10 ft wide. The bar seems
to be fast closing the mouth of
the stream.



June 16-89 Sunday
Returned to our camp on
Locallan Stream

1076
D

June 17-89

1076-D continued.

In a.m. took up 1076 D
where we had left it on the 13th

1076 D / Shale on the second
island from mouth of Tombigbee
stream. It is very much
jumbled up on account of a
trap dike that runs up
through it. The traps are
from 6 inches to 1 ft thick
The shale is barren.

D 8 is a heavy sandstone
It is probably the
continuation of D 6
It dips 45° N 26 W
Rock barren.

No bed rocks is seen
until the cove of Baker
Brook is reached.

D 9 A heavy sandstone
along the shore at the
mouth of Baker Brook
Dip is 90° Strike W 20 S
barren

? (This is possibly the westerly
continuation of D 8-D 6-
and B 2)

The same sandstone is
again seen on the south
side of the point south of
Baker Brook.

In the early afternoon
arrived at Point and began
to pack up my collections.

1061
B

June 18-89

Spent the whole day packing
up my collections.

June 19-89 Started up river on
return trip

Stopped off at Stony Brook
on the Long Pond Rapids.

1061 B'

The rock is a hard tough &
sandstone, shaly in some
places. The greater number
of the fossils are in the shaly
parts. Dip 45° S 20° E \searrow

A fine locality.

77

1061
B

June 20-89 1061 B 2

A ledge about $3\frac{1}{4}$ m.
above Stony Brook
A hard barren sandstone with
veins of quartz
Dip 55° N 20° W.

B³ At "Burnt Dam" ^{1 m above} Stony Brook
here an anticlinal
axis crosses the stream \searrow

rock like B 2

Moose River

axis W 20° S

like B 2

Moose River Dip 30° N 20° W

North side

looking E 20° N

axis

Dip 20° S 20° E

South side

June 21-89 Went up Parlin
Stream.

Examined a hill of hard sandstone
on the left bank ~~some~~ miles
up stream. No fossils.

June 22-89 1959C continued

Went up stream to continue
the section.

The section is measured down
stream as the rocks tilt
S.E. and the stream flows
N.E. so that in descending the
stream one ascends geologically.

1059
C

79

4 1059C+9 upon the stratum
forming +9 of page 52
there lies about 40 ft
of gravel.

C+10 At the second bend in the
stream (2nd below +9) is
a dark somewhat fissile
shaly sandstone 5 ft thick
and containing fossils.

C+11 3 inches of fissile
shale - The surfaces covered
with beautifully colored iron
deposits. Dip 25° S E
many fossils

C+12 has no iron covered
surfaces and is barren
4 ft thick

C+13 is like +11 with many
fossils and is 6 ft thick

C+14 is a heavy band of sandstone
4 ft thick + barren

1059
C

1059 C

+10 +11 +12 +13 +14 form
a cliff on the right bank
of the stream about
1/2 mile above the mouth
of Lanes Brook

Found 3 boulders 1059C 4-W-2
in the bed of stream at lower dam.
They all contain very fine fossils.

June 23 - Sunday

Changed camp to headworks
at mouth of Parlin Creek

1059
D

1059 D

June 24 ~~Wednesday~~ on
Canada Road in town
of Jackson. 10 miles
south of Moore River Settlement
+ 5 miles north of Parlin
Point.

The section commences with

D' on East side of Canada Road
at Bear Brook 3 m. north
of Parlin Pond Hotel.
A massive bed of sandstone
of unknown thickness
with fossils on some layers.
The rock is very tough and grey.
Dip 18° E 20 N.

D^x A sandstone boulder with Orthoceras

D² Blue sandy shale - many fossils
Dip 20° E 20 N.

D⁵ In reading no 13 a boulder with a
coral C

D³ lowest outcrop (no 19) of slate
fossils C

D⁴ slate underlain by fossils
Dip 15° E 20 N.

The following readings of are taken along
 the road ascending in a northerly direction.
 Done in order to compute thickness of strata.

Strata	Bearing	alt (ft)	distance (ft)	no. of readings
Low part B'				
sandstone	N 16 W	5 1/4	42	1
sandstone	N 14 W	5 1/4	69	2
sandstone fossils	N 40 E	4	18	3
drift	N 10 W	7	345	4
"	N 20 W	37	378	5
"	N 16 W	11	162	6
"	N 25 W	24	390	7
"	N 25 W	0	750	8
"	N 20 W	7	90	9
"	N 10 W	5 1/4	192	10
"	N 11 W	11	336	11
D ² slate ledge	N 20 W	9	831	12
watering trough	N 20 W	10	507	13
drift	N W	6	300	14
"	N 25 W	7	156	15
"	N W	12	429	16
"	N 30 W	30	699	17
"	N 10 W	40	540	18
D ³	N	10	105	19
Goldman House	N	110	2340	20

1060 B

1060 B

Went up to lake to Whitney
 Ledge on South shore 1/2
 mile west of Parline stream

B' in cutting on
 C. R. R.

sandstone very hard
 much pitted - much iron
 pyrites - few fossils - dip 10 S 20 E
 30 ft thick.

B² laminated sandstone
 upon B'. much broken up
 no fossils - interstratified
 with thin bands of soft shale
 thickness 18 ft.

B³ on north shore a 1 mi
 sandy shale - two fossils -
 dip 10 S 20 E -

B⁴ on South shore 5 1/2 miles
 from outlet. many fossils

1060
P

dip 20° S 20° E
thickness 40 ft
thin layers with fossils are
in the otherwise barren
sand stone

B⁵ At old Pat McKinney Place
at upper narrows, a
large ledge of sandy slate
dip 55° N 20° W. no fossils
For the distance of 3 miles
the same slate is exposed along
the shore of the lake, until
the inlet is reached

A few slate ledges appear in
the river. The dip is 55° N 20° W
and the rock of the same
character as that on the
lake

Reached Jackson town
supper.

85

June 26. Packed fossils all
day. Left for Uthman at
12 P.M. on C.P.R.R. via
Montreal reaching there
at 9.45 A.M. on the 28th.

Altitudes U. T.

155

U. S. G. S. Station numbers
in Ulster and Greene Cos N.Y.,
1053 Esopus Ulster Co. N.Y.
1054 Marbletown Ulster Co
1055 Rosendale Ulster Co
1056 High Falls Ulster Co
1057 Olive City Ulster Co
1058 Lanesville Greene Co

in Somerset Co. N.J.

1059 Parlin Pond Twp.
1060 Long Pond
1061 Sandwich Twp.
1062 Brassna Lake
1076 Moosehead Lake.

Boxosent to H. S. W. Ithaca

- 1 Kingston N.Y. 1053 Apr 28
- 2
- 3 Mt Marion N.Y. 1053 May-2-89
- 4 Marbletown N.Y. 1054-5+6 May-7-89
- 5 Shokan N.Y. 10540+1057 May-8-89
- 6 Laureville 1058 May-16-89
- 7 Carlin Pond Me via Jackmantown Greenville
1059 June-1-89
- 8+9 Kines Me. 1060-1061-1062-1063 only
partial collections from 1060, 1061, and
1062 June-18-89
- 10 - Jackmantown Me. Stage to Skowhegan then R.R.
1060, 1061+1062- June 27

Fossils of Schodamine Crin.

Hall Pal. N.Y., vol 4 ^{pt I} p 2

Orthis Kunzei

Therapsid rhynchus Chemungensis

Strophomena demissa

" perplana

" crinistrata

Spirifer pinnatifidus

Atrypa impressa

many Cyrtoceras

Egyroceras

Dalmanella

Phacops

Lichas

Acidaspis

Hall Pal. N.Y., vol 4 p 77 page 1

Canda Galli Crin almost non fossilifer

Thin bedded Canda Galli

A Platyroceras like P. tortuosum has been found in it.

Passage from Orisk. to this Crin. is very abrupt & strongly defined, dark or nearly black weathering to gray or brown gray with strong joint lines nearly at rt. to 45 bedding & these being often close & well defined while the lines of bedding are obscure, give it the appearance of nearly vertical stratification.

In upper part a gradual increase of calcareous matter & fossils imperceptibly to the Schodamine Crin. which contains many fossils.

Stratigraphic Classification of

11 30

Chemung { Chemung < Ithaca
 Portage

Hamilton { Genesee < Tully
 Hamilton
 Marcellus

Conif. { Conif. { Onondaga
 Schuchman
 Conif.
 Conif. Gallie
 Oniskany

Exp. Sil. / Low Helderberg

height of eye = $5\frac{1}{3}$ ft

